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HEARINGS

Before The

COMMITTEE ON PUBLIC WORKS

UNITED STATES SENATE

WATER POLLUTION CONTROL ACT

Sec 306 - New Sources
Sec 307 - Toxic Substances
Sec 309 - Enforcement
EXECUTIVE SESSION

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EXECUTIVE SESSION

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WATER POLLUTION CONTROL ACT

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MONDAY, SEPTEMBER 20, 1971

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United States Senate,
Committee on Public Works,
Washington, D. C.

The Committee met at 3:30 p.m., pursuant to recess, in
Room 4110, New Senate Office Building, Hon. Jennings Randolph,
presiding.

Present: Senators Randolph, Eagleton, Tunney, Cooper,
Boggs and Jordan.

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Senator Randolph. Gentlemen, we will proceed.

I am sure one or two of the other members will be
here.

I believe you have been talking with some of our staff,
especially Leon, about how we will continue, Senator Eagleton.

It seems best we just go on as we have, and work
tentative agreements, and where we do not work solid agree-
ments, we will come back.

2
1 Senator Boggs. Mr. Chairman, if we will follow that,
2 I agree that is a good policy, and I have a point on the
3 number one item on the agenda that I would like to bring up
4 at this time having to do with report language, if I may.

5 Senator Randolph. Yes, indeed, go right ahead.

6 Senator Boggs. Here is a copy.

7 Senator Randolph. What do you do now?

8 Senator Boggs. On Section 306, new sources, this section
9 requires that the Administrator set a new source standard for
10 each industry, based on, and I quote:

11 First, this is right from the language from the
12 proposal.

13 "The latest available control technology processes
14 operating methods or other alternatives."

15 Some people feel and have a concern that that would
16 pin every industry down, and you might say to the same exact
17 type of process, and it ought to be made clear that is not the
18 intention.

19 This section does not mean that the standard should
20 specifically require the utilization of any single process or for
21 raw material.

22 Rather it means that the Administrator shall determine
23 what level of effluent shall be achieved by the use of the lat-
24 est available technology processes and operating methods and
25 then set the standard at that effluent level.

1 Let me read this proposed report language.

2 Section 306 -- New Sources. This section requires
3 that the Administrator set a new-source standard for each
4 industry, based on "the latest available control technology,
5 processes, operating methods, or other alternatives."

6 This section does not mean that the standard should
7 specifically require the utilization of any single process
8 or raw material. Rather, it means that the Administrator shall
9 determine what level of effluent can be achieved by the use
10 of the latest available technology, processes, and operating
11 methods, then set the standard at that effluent level. The
12 operator of any proposed new plant will then have full freedom
13 to tailor his operation, his processes, and his raw materials
14 to achieve that effluent level.

15 The Committee can see no useful purpose in any effort by
16 the Administrator to determine what processes or materials
17 industry should use. Rather, the Administrator should be
18 interested only in the level of effluent, permitting each
19 new plant to use its own engineering ingenuity to achieve that
20 low effluent level.

21 Something to that effect.

22 Senator Randolph. I see the thrust of what you are
23 doing.

24 Senator Boggs. And it has been brought to our atten-
25 tion--

4 1 Senator Randolph. Are there members now who would
2 like to discuss this?

3 I think I see some places where we may be out to have
4 some change of words.

5 Senator Eagleton. Let me add mine to your comment.

6 Senator Bentsen. I completely concur with your
7 comments.

8 I get concerned with the word about the latest. It
9 requires some definition.

10 Senator Randolph. I do not like the word latest,
11 because some things can be bad if they are the latest, or
12 they can be good.

13 Senator Baker. About a fifty-fifty chance.

14 Senator Randolph. I would think if we would want to
15 use the word best, it may be better.

16 Senator Boggs. I would think best would be better.

17 Senator Bentsen. Mr. Chairman, if that is what you
18 thought of, I am for it.

19 Senator Randolph. Well, I just believe that we would
20 better serve our purpose if we changed that.

21 Do you have any comment?

22 Senator Eagleton. Not on the change of the word best.

23 Senator Randolph. Is there objection to using the
24 word best instead of the latest?

25 Senator Boggs. I agree.

1 Senator Randolph. Without any voting, let's accept
2 that.

3 I think that is sound.

4 Senator Eagleton. Can I comment on this, are we
5 really talking about the level of effluent, or are we talking
6 about effluent reduction?

7 Senator Boggs. About the freedom to reach any process
8 they want to reach the effluent standard.

9 We do not tell them they have to use a certain
10 process.

11 They use their own engineering.

12 Senator Eagleton. It should be the Administrator
13 who should decide whatever the limitations or reductions
14 are.

15 Senator Boggs. Yes, I think you are right.

16 Senator Eagleton. And down here with levels, use
17 reduction again, to achieve effluent reduction, and then it
18 could conform the rest of the way through.

19 Senator Boggs. Very good.

20 Senator Randolph. Even though it takes a minute, I
21 would like to have it read as we apparently agree, for there
22 might even be a reason in a second reading that something
23 would come to your mind.

24 Leon could read it. All right. Senator Eagleton.

25 Senator Eagleton. Section 306 -- New Sources. This

section requires that the Administrator set a new-source standard for each industry, based on "the best available control technology, processes, operating methods, or other alternatives."

This section does not mean that the standard should specifically require the utilization of any single process or raw material. Rather, it means that the Administrator shall determine effluent reduction or limits can be achieved by the use of the latest available technology, processes, and operating methods, then set the standard at that effluent level. The operator of any proposed new plant will then have full freedom to tailor his operation, his processes, and his raw materials to achieve that effluent reduction.

The Committee can see no useful purpose in any effort by the Administrator to determine what processes or materials industry should use. Rather, the Administrator should be interested only to the extent to which effluent is limited or reduced, permitting each new plant to use its own engineering ingenuity to achieve that effluent reduction.

Senator Randolph. I think generally that is fine.

All right, gentlemen. Thank you very much, Senator Boggs, for bringing that to our attention.

Senator Buckley. Mr. Chairman, are we discussing this generally?

Senator Randolph. We were moving along as we had, one

7 1 by one, and I think that anything you would desire to bring
2 to our attention, fine.

3 Senator Buckley. I have one concern about the use of
4 the word modification, in paragraph three, section 2, the
5 term new source means anysource, and then later on, the
6 word modification is defined as any physical change.

7 Now, the effect, as I understand it of
8 this section is to require any facility which is a new source,
9 to immediately comply with this highest standard we have
10 just discussed.

11 I can see a situation where you would have an existing
12 plant and facility, wherein the modification that will result
13 in an improvement over the pre-existing situation, as far
14 as environmental impact is concerned, yet fall well short of
15 the ideal, and I think we ought to make sure that we would
16 not impede this kind of improvement to the operation of this
17 language, and also make sure everytime you change a screw or
18 a bolt, it does not become somehow a modification.

19 Senator Baker. How would you word that change?

20 Senator Buckley. I am not sure.

21 Senator Baker. That is a problem that has confronted
22 us from almost the beginning.

23 Senator Buckley. I would have to talk about a major
24 modification, or something of that sort, or could it be
25 referred to the authority granting the permit, in the case

of a modification having this effect, that it be worked out within the scope of a permit.

Senator Baker. We have to be very careful to avoid a pitfall in such as the aircraft field.

It may be necessary in the aircraft industry, but I do not think it is necessary in the environmental field, that is to make the modifications so severe you are inundated in a sea of paper work.

I think the language that we have here lends itself to that interpretation.

I frankly share Senator Buckley's concern in this respect, and I quickly confess I do not have a suggestion also.

Mr. Billings. Mr. Chairman, the staff again toiled with this, and you recall in the air bill, we went through a similar attempt to define modification, and the statutory language is as follows:

"Term modification means any physical change in or change in the method of operation of a stationary source which increases the amount of any air pollutant emitted by such source, or which results in the emission of any air pollutant not previously emitted."

The staff included in this language as an additional caveat, which is the relationship of that increase to the effluent limitation imposed on the plant, because of a prac-

9 1 tical matter, it would be impossible, the turning of a screw,
2 to increase the effluent, without violating the effluent
3 limitation, and when you got beyond the effluent limitation,
4 then you would be in violation of the conditions of the
5 permit, and that is why that language in 24 has been
6 included.

7 Senator Baker. Do you broaden the scope of the
8 Administrator to make significant change?

9 Mr. Jorling. I think that would be necessary if we
10 rewrote the air language bill, but if you got with compliance
11 or noncompliance with the effluent limitations, then you get
12 into the question of whether it is a significant violation
13 or not.

14 Senator Baker. Not a significant violation, but a
15 significant change.

16 Senator Buckley. The problem is modification in a
17 minor portion of a great big complex, that you would suddenly
18 have to scrap the entire large complex.

19 Senator Eagleton. How do you define significant
20 change?

21 Senator Baker. The only way you could do is let the
22 Administrator decide.

23 That troubles me also.

24 Senator Eagleton. There is litigation also involved
25 here.

10 1 Senator Boggs. The modification to be meaningful has to
2 increase the amount of any water pollutant discharge by
3 such source in violation of any effluent limitation, so if
4 it was a modification which did not increase the effluent,
5 then it seems to me that describes it, does it not?

6 Senator Eagleton. If it does not increase the amount
7 of any water pollutant discharge in violation of the effluent
8 limitation, then it would not be prohibitive.

9 Senator Boggs. That is right.

10 Senator Buckley. If you go to the end of that
11 definition, which you say or which results in discharge of
12 any water pollutant not previously discharged, it seems to
13 open the way to arbitrary trouble making that is not intended.

14 Mr. Billings. In recognition of the difficulties creat-
15 ed by this kind of a regulatory procedure, the staff has dis-
16 cussed at some length this, and it has been unable to find a
17 satisfactory mechanism to apply to what has become known as
18 the Bentsen standard to individual sources of pollution, which
19 may be subject to this section.

20 On page sixty-nine, bottom of the page, line 25, it says
21 the Administrator shall promulgate such standards, and so on.

22 The staff is concerned in that the way that language
23 is drafted, it would mean you would have to let everybody
24 off the hook on the basis of perhaps one case of adverse
25 economic costs, and it would be better to phrase that language

11 1 so that one particular source would come into the Administrator
2 on petition, so if you got into the situation, where the
3 whole plant had to be scrapped because of a small change of
4 the operation, there would be some flexibility for modifica-
5 tion of the standard.

6 Perhaps it might be a better way as to modification.

7 Senator Randolph. Any further comment on this?

8 Senator Buckley. Perhaps we could come back to this
9 at some other time.

10 Perhaps, Leon, you could have some language to describe
11 modification.

12 Senator Eagleton. If you leave the language on 67, the
13 way it is, if a modification is made, there would still be a
14 safety valve in the Bentsen language on page 69.

15 Mr. Billings. Unfortunately, the way it is presently
16 phrased, that would have to be a general safety valve rather
17 than a specific, and what the staff is looking for is somewhat
18 or rather some way to turn it around so that the person
19 affected, the owner-operator affected by the standard could
20 petition the Administrator for relief on the basis the costs
21 and the benefits were unrelated, so you did not have a total
22 compromise of the standard.

23 The only question to that, the question that raises is
24 does that sound like opening the door so you could drive a
25 truck in.

1 The staff would like some guidance to whether you could
2 develop some language.

3 Senator Buckley. I think we just have to assume
4 that the Administrator will be able to handle that question,
5 to leave the door open just wide enough, but if we could
6 make sure that that language modification is keyed in with
7 this alternate discretion, fine.

8 Senator Randolph. Let's come back to it again with
9 the understanding we continue to look at it.

10 I know your purpose, and I am sure we can keep this
11 in mind, at least try to understand one another, and what we
12 are doing.

13 Mr. Billings. May the staff raise two more points about
14 this section.

15 Number one, the Administration has recommended deletion f
16 from the list of plants which appear on page 68 of the nuclear
17 fuels processing.

18 The staff asks whether the recommendation for deletion
19 was because the internal conflict between the AEC or EPA, or
20 some other reason, and the Administration advised us that they
21 did not feel competent to regulate the nuclear fuels processing
22 industry, and that the competence did exist in the Atomic
23 Energy Commission as well as the authority.

24 The staff has no recommendation.

25 Senator Eagleton. Is this the only reference in the

1 whole act?

2 Mr. Billings. No, there are others.

3 Senator Eagleton. May I ask would deleting this
4 language take EPA entirely out of the nuclear power plant
5 area?

6 Mr. Billings. No, Senator.

7 The EPA would still have whatever authority they might
8 assume relative to electric power plants that are steam, which
9 appears on page sixty-nine.

10 Also, it would have the general water quality responsi-
11 bility in connection with radio activity water quality
12 standards.

13 This is a matter which is at some issue in the courts,
14 and also, the lists set forth a minimum, and it would be
15 nothing except the absence of this particular industry
16 on this list to keep it, keep them from adding to it.

17 They could add to the list as they wanted to, unless
18 the Committee report specifically said this is one outside
19 of their jurisdiction.

20 Senator Beall. This is not necessarily reluctance
21 or lacking on their part. It is their inability to come up
22 with the information that is needed within ninety days.

23 Mr. Billings. That is what we were informed.

24 Senator Eagleton. It would still take them out of the
25 jurisdiction of nuclear fuels.

14 1 Mr. Billings. They would not be mandated.

2 Mr. Jorling. Presently these facilities are controlled
3 by AEC. They are under a hundred percent contract in some
4 instances.

5 Senator Eagleton. If you strike it out here, is not
6 that legislative history we did not want it in, and therefore
7 do not need it?

8 Mr. Billings. You could expect additional legislative
9 history would be made on the floor.

10 Mr. Jorling. You could say the Subcommittee deleted
11 that because it believes on recommendation the Administrator
12 did not have the competence in the time period required to
13 include nuclear processing facilities.

14 Senator Baker. There is another complication which
15 may or may not be persuasive, but is not only a nuclear process-
16 ing plant entirely different from steam generator, but the
17 AEC licensed the plant, approves the location, the design
18 of the plant, supervises the construction, and then it
19 continuously monitors the nuclear material that is being
20 processed.

21 It is really related more to the weapons program than
22 it is to the power program.

23 What they are doing is they are guarding against
24 somebody pirating material. That does not mitigate against
25 EPA getting into this field. They do not object to them

15 1 regulating the thermal effluent, or the other environmental
2 consequences of the nuclear plants, but they stoutly resist
3 any efforts to get inside their licensed controls.

4 That is what we are up against.

5 Mr. Billings. As I understand, and if we were to enact
6 a program, do you know if these plants would be privately
7 owned and operated, or would they be nuclear contractors.

8 Senator Baker. Oak Ridge is really not in the processing
9 business.

10 It is in the fuel concentration business, but there
11 are private corporations, and there are public corporations,
12 both.

13 In the breeder program, you will have probably some of
14 each.

15 You will probably have some privately-operated government
16 licensed operations, and you will probably have some government
17 owned operations.

18 Mr. Billings. What is that one in New York?

19 Senator Baker. It is private. If I am not mistaken,
20 every processing plant is a hundred percent government con-
21 tracted.

22 Every piece of nuclear fuel in the United States is
23 done under Federal Government contract, even though it comes
24 from private utility companies.

25 Mr. Jorling. I think there are only three major ones.

16 1 Would it be appropriate in the report to accompany the
2 deletion with the statement it is without prejudice with
3 respect to subject (b), which is authority to add additionally
4 later?

5 Senator Eagleton. The reason we took it out, we were
6 not certain as to whether we could come up with regulations
7 within ninety days.

8 Mr. Billings. Yes.

9 Senator Baker. I am not sure he could do it by
10 regulations. If he required certain things that were at
11 variance with the requirements of the AEC act, it might take
12 more than just the regulations to administer it.

13 Mr. Billings. The other issue, Mr. Chairman, there
14 has been considerable interest expressed in the fact that this
15 section does not include definition of the word construction.
16 The Senate bill as passed last year on new standard perform-
17 ance for air pollution did include a definition for construct-
18 ion, but that was dropped in conference, and it is not a part
19 of the act.

20 The definition in that bill that follows, construction
21 means any placement, assembly, and so forth.

22 Senator Randolph. I think that this is a relatively
23 important matter, because when industry can invest a consi-
24 derable amount of money in connection with construction which
25 does not come to the point of actually constructing the building

17 1 itself, but the preparation for it only, because you can move
2 forward and commit yourself, and expend sums of money, when
3 you have not actually started to build or construct the
4 facilities or plant in question.

5 It seems to me, therefore, we have got to be reasonable
6 and recognize the equity, and not have an amount of money
7 spent from which you could not draw back without really the
8 loss of that considerable sum.

9 What is your thinking about that?

10 Senator Bentsen. I will have to plead guilty. I am
11 thinking about another amendment.

12 Senator Randolph. That is all right.

13 Well, I will shift to North Carolina.

14 Senator Jordan. You are absolutely right. I will
15 give you a specific example right now.

16 When they started out to build the Madison Memorial
17 Library, they spent a half million dollars to get the
18 plans. Had it not been completed, we would have still been
19 out the half million dollars, but it is part of the cost. If
20 we ^{had} decided not to build it, we still ^{would have already} spent the half million
21 dollars.

22 ~~Now, they are committed for the whole thing through~~
23 ~~there, so that is an actual part of any plant.~~

24 Mr. Jorling. The Administrator would have the dis-
25 cretion to decide when a particular activity became subject to

18 1 the provisions of this section.

2 We have provision here on page seventy, standards, and
3 so on, shall become effective on promulgation. It does not
4 say what particular act triggers the implementation.

5 Senator Randolph. I am not sure that is what I want
6 to give him, after all, there are determinations to be
7 made, but there are also clear cut expenditures which I
8 see along the way, and I would just at least question it
9 for the moment, as to perhaps improvement could be made in
10 this language.

11 That is all I want to say.

12 Mr. Jordan. It ought to be in the law what the
13 Administrator can do or cannot do.

14 Senator Boggs. The question is whether we should have
15 language, and we do not have any language at all.

16 Senator Randolph. I would hope we could.

17 Senator Eagleton. Don't we have language from the
18 air bill?

19 Mr. Billings. Would it be appropriate for the staff
20 to include that language for now to try to get reaction
21 from the Administration?

22 Senator Randolph. Let's do that for the time being.
23 Would that be agreeable?

24 Senator Eagleton. This is from the Senate version of
25 the air bill.

19 1 Construction means any placement, assembly, or
2 installation of facilities or equipment (including con-
3 tructural obligations to purchase facilities or equipment) at
4 the premises where such equipment will be used, including
5 preparatory work at such premises.

6 Senator Randolph. That may be good language.

7 Mr. Billings. It was written by members.

8 Senator Randolph. It would not be the latest, but
9 it might be the best.

10 Let's leave it at that point, thinking in terms of
11 that type of construction.

12 I think we generally agree we want to be very careful
13 not to have an expense incurred that has to be, in other
14 words, washed out.

15 All right.

16 Are there other matters that individual members
17 have to bring before we continue?

18 Let's move ahead then, Leon.

19 Mr. Billings. The next item on the agenda is Federal
20 enforcement, which appears on page seventy-seven, the staff
21 points out we are passing over the section of inspections,
22 because there is no issue with the Administration on that
23 section, and the staff has been instructed to do some draft-
24 ing on the problem of toxic pollutants.

25 The question at issue, in the enforcement section

1 raised by the Administration is whether or not there should
2 be an administrative hearing to determine in concert with the
3 states, polluters, and so on, whether or not violations of
4 the requirements of the Act occurring.

5 The staff has had considerable discussion with the
6 Administration, and the problem is whether there would
7 be additional litigation which would perhaps slow down applica-
8 tion of this section, and finally, that there is under
9 Section 104, ample authority for the Administrator to investi-
10 gate potential violations for the purpose of making the
11 findings, or gathering information to see where the violations
12 are occurring.

13 Senator Eagleton. Is not this the main enforcement
14 section?

15 Senator Billings. Yes, sir.

16 Senator Eagleton. Correct me, if need be, it said if
17 he finds violation, he shall issue an order or go to court,
18 but he has to find the violation first.

19 Senator Jordan. And then go to court.

20 Senator Eagleton. To issue an order, and then go
21 to court.

22 Senator Beall. He has to go to court, doesn't he?

23 Senator Eagleton. You go to court if he issues the
24 order.

25 Senator Beall. The only place the Administration can

21 1 he questioned is in the court, there is no opportunity to go
2 to the Administrator, and lay another side of the story
3 before the Administrator.

4 Mr. Jorling. We have provided in the print, as in
5 the air bill an alternative method for the Administrator
6 to proceed.

7 If he is pretty secure, he would proceed directly
8 to court.

9 If the issue is not clear, the facts situation is
10 not quite as clear as he would feel justified, he
11 issues an order, and then there is a provision for consulta-
12 tion with the alleged violator on the issues in controversy
13 before he then proceeds, either the alleged polluter brings
14 himself into compliance, or the Administrator concludes why
15 he should initiate the enforcement activity in court, so this
16 provision for consultation is provided, and we have received
17 some criticism as to the amount of time provided for this
18 consultation to take place before the Administrator moves to
19 the second stage, to agreeing there is no violation, or
20 moving to actual judicial enforcement.

21 Senator Jordan. How much time is provided?

22 Mr. Jorling. There is provided ten days after the
23 initial order for consultation.

24 Senator Beall. That procedure is only followed in
25 cases where the Administrator is unsure for himself.

22 1 Senator Jordan. You have ten days to answer him, or
2 go to court.

3 Mr. Billings. Senator Jordan, there are two time
4 periods.

5 One where the Administrator finds there is a violation
6 of the state plan of effluent limitation, and finds after
7 thirty days, if that violation was continuing, he could issue
8 an order to go to court, or after he has found that generally
9 the state is failing to enforce its program, there is a
10 general breakdown of the state enforcement capability, then
11 he can after thirty days move in and enforce on a ten-day by day
12 basis any violations within the state.

13 Mr. Jorling. For those requirements established under
14 state implementation plan, there is a thirty-day period in
15 addition, if he chooses to issue an order, so that there would
16 be additional time.

17 Senator Boggs. What page is the ten day time?

18 Mr. Billings. On page seventy-nine, paragraph four.

19 Senator Eagleton. About halfway down.

20 Mr. Billings. About line thirteen.

21 Mr. Jorling. We have also received comments from
22 the other side of the issue.

23 The period should be reduced to seventy-two hours.

24 Senator Tunney. I would like to ask why they allow
25 the suits he brought in district court in the two instances, in

23 1 this draft, and yet when you get back on these other sections,
2 it says it must be in U.S. Court of Appeals, of the District
3 of Columbia.

4 Why would they change and be required to go to the
5 District of Columbia?

6 Mr. Jorling. The thing is for any enforcement action.
7 In the judicial review section, it is split into two
8 categories.

9 It is judicial review which is national in scope, it
10 is limited to the D.C. Court of Appeals.

11 If it is a challenge of an approved or substituted
12 implementation plan, by the Administrator, or substituted by
13 the Administrator, for what he termed to be an inadequate one,
14 that is challengable in the appropriate circuit, but the
15 judicial review section is limited to the Court of Appeals.

16 The enforcement actions are limited to the district
17 courts.

18 Senator Tunney. That refers to the national standard
19 itself?

20 Mr. Jorling. Any promulgation of the Administration
21 national in scope would be reviewable in the D.C. Court of
22 Appeals.

23 Mr. Billings. Senator Cooper's point, when they ad-
24 vocated-- Well, there is only one interpretation.

25 Mr. Jorling. Incidentally, under the Air Pollution

24 1 bill, which it has a similar provision, it had been promulgated
2 to national standards.

3 For the most recent of them, there have not yet been
4 filed any petition for judicial review.

5 Mr. Billings. There must be something wrong with the
6 standards.

7 Senator Jordan. There apparently have been no viola-
8 tions.

9 Mr. Jorling. There have not been any to date.

10 Senator Eagleton. Anybody else have any questions on
11 number two?

12 Senator Boggs. The question, is ten days too short
13 or too long?

14 Senator Jordan. I think that ought to be thirty days
15 at least.

16 The people have got to get their facts together, and
17 get their attorneys, ~~AND THE EVIDENCE FROM THEIR~~ ~~or the~~ chemists, All of these things
18 will have to be determined by technical people.

19 Senator Boggs. If you said not to exceed thirty days,
20 he could still make it ten days, if the case justified.

21 Senator Jordan. Thirty days is not long, when you have to
22 set proceedings, ~~which can be a very serious problem.~~

23 Senator Boggs. What is the argument in favor of
24 ten days, is it time enough?

25 Mr. Billings. In most cases, polluters will be

operating on a very specific compliance, with very specific effluent limitations, so theoretically, a violation will be within some very well defined parameters.

They will not be starting from scratch. They will either be behind in their schedule of compliance, or they will be discharging in violation of the limitation.

Senator Boggs. When that plant up in Pennsylvania pollutes the White Clay Creek, the water companies that use that water, you could not wait for thirty days.

Mr. Billings. In that particular instance, they would use the emergency power section.

That would be contamination of the public drinking water.

Senator Jordan. On the other hand, if the operator thinks he is in compliance, and you say he is not, it will depend on this chemical analysis ~~business~~ to determine who is right.

It took four months to fill out this application, ^{and} to determine ^{WHETHER TO GRANT} ~~to give~~ the license, ~~and hundreds of dollars to fill out the application,~~ so it is not a simplified form.

Senator Boggs. I agree with you, if they have to start from scratch, but the point you make, Leon, they are already on top of the problem.

Senator Jordan. ^{LET'S TAKE THE CASE OF A} ~~if your~~ plant is operating, and ~~they~~ ^{IS FACED} ~~is faced~~ ^{THAT} ~~comply, or fail to comply, then you say your~~ effluent is not ^{WITH A COMPLAINT THAT ITS}

meeting the standard.

Well, you will have to get somebody to prove ^{that the plant} ~~he~~ is or ^{polluting.} ~~is not.~~ The people I know ~~that are people~~ that built some of these plants, ^{WHICH ARE} discharging into the rivers, ~~the people~~ ~~building the plants~~ could not fill out the applications.

They had to hire engineers and college professors, ^{to do} ~~it for them,~~ and you cannot do that in a day. ~~so~~ ^TThirty days will not hurt anybody.

Senator Boggs. He could make it shorter if he wanted to.

Senator Beall. If I understand it, there is thirty days.

Senator Boggs. No. Thirty days to notify them.

Senator Jordan. I cannot see where you will hurt anything with thirty days.

Mr. Jorling. It is in the best interest of the corporation to attempt to solve the issue at the earliest possible date, because the penalty provisions are applied on a per day basis.

Senator Boggs. Retroactive.

Mr. Jorling. Yes. This is not the proof question.

Senator Jordan. How do you know?

Mr. Jorling. If the Administrator concludes, and the alleged polluter conclude there is a factual situation to be resolved in court, then it would proceed there.

Senator Jordan. I understand that, but I do not think you can get your tests out in ten days.

Mr. Jorling. With the new requirements of this bill, the effluent limitation should be stated in rather precise terms, and the monitor requirements---

Senator Jordan. I think \$10,000 a day ^{IN PENALTIES} is pretty ridiculous, but it is in there, and, of course, if it is assessed against ^{a city} ~~the cities~~, it will be a joke. You cannot lock ~~the~~ up a city ^{OR ENFORCE A penalty as you can} ~~up~~ against corporations. You also can ~~hit them~~ make things ^{SO TOUGH FOR COMPANIES THAT} ~~over the head to where~~ they might ^{decide to} ~~just~~ quit, operating.

Senator Eagleton. How about this, why don't we have pending, like you say, thirty days, and we will come back to it.

Senator Jordan. I know there are so many things about these administrative regulations ^{WHICH TAKE TIME TO WORK OUT.} ~~there a fellow comes in~~ and ~~writes you a letter.~~

I got a letter today mailed last Thursday from North Carolina. I am not going to jump on the head of the Post Office Department, but those ^{DELAYS DO} ~~things~~ happen, and ten days is a short time to come up with any kind of an answer, ^{PARTICULARLY} ~~and some~~ ^{WHEN THE QUESTION IS A} ~~of these things are very serious, INVOLVED ONE.~~

Mr. Jorling. It might be helpful to offset that, because we have had problems with Senator Cooper in Kentucky, that the order might be issued by personal service.

Mr. Billings. Is that where you have to find him?

1 Mr. Jorling. Yes.

2 Mr. Billings. What if it is a still that is
3 discharging?

4 Senator Jordan. There will be hundreds and hundreds
5 of these cases.

6 There will not be just one, ^{AND} ~~so~~ the Administrator
7 cannot handle all of ^{them} ~~these things~~ at one time, ~~and then you~~
8 ~~come back in, and there you are, so~~ You have got to give
9 a little time for people to at least meet a complaint, if
10 it can be met, and I cannot see where it will do any harm,
11 whatsoever, *to allow the 30 days.*

12 Senator Eagleton. All right. We will have that
13 before the Committee, your amendment.

14 Senator Jordan. All right.

15 Senator Eagleton. Anything else, Leon, or Senator
16 Boggs?

17 Senator Boggs. Are there any other points at issue,
18 Leon?

19 Mr. Billings. No, sir, I do not think so.

20 Mr. Jorling. There is another issue, the Administrator
21 has raised in the context of enforcement, that will be
22 resolved later on, that they note on page seventy-eight,
23 litigation should be conducted by the direction of the
24 Attorney General, but we can hold up on that.

1 Senator Boggs. Instead of who?

2 Mr. Jorling. We had provided that the Administrator
3 shall be represented through himself, or through his own
4 attorneys.

5 In the Clean Air provision, we had a similar authority
6 of the Administrator to hire his own attorneys to represent
7 him.

8 That was modified in conference to require him to at
9 least first request the Attorney General to represent him.

10 Coincidentally enough, the opinion that was written,
11 or issued under the offices of OMB, it came out of the Justice
12 Department on the question of who represents Federal agencies,
13 and it was written by the present Administrator when he was
14 the Assistant AG. He ruled the agency should represent
15 them.

16 Senator Boggs. If they do it with Air, we ought to do
17 substantially the same thing here.

18 Mr. Billings. The staff would recommend it.

19 Senator Boggs. Right.

20 Senator Eagleton. Always bear in mind there will be
21 some changes made in conference.

22 Senator Boggs. Right. There are bound to be.

23 Senator Eagleton. Do I take it you want to conform
24 the litigation question, the AG gets the first crack, and if
25 he says, I am too busy, then the Administrator can proceed on

1 getting his own attorney?

2 Mr. Billings. That is correct.

3 Senator Eagleton. Anything else on enforcement?

4 All right.

5 Item three, refuse permit program.

6 Mr. Billings. The staff recommends passing over that
7 to be considered in relationship to Sections 301 to 304.

8 Senator Eagleton. Ocean Dumping.

9 Mr. Billings. I think in the absence of Senator
10 Baker, we should pass it.

11 Mr. Jorling. The meeting has not been held yet. The
12 earliest it could be held is Thursday.

13 Senator Eagleton. All right. We will pass that.

14 Mr. Jorling. Leon, on ocean dumping, we have been
15 preparing language to implement what Senator Baker thought
16 would be the proper approach, and that is tied to the area
17 of Commerce Committee jurisdiction and the areas for the
18 Committee on Public Works, and the staff was busy at
19 work on that.

20 Senator Eagleton. Those things that pertain to
21 transportation, that material is theirs.

22 Mr. Jorling. What I attempted to do was to amend the
23 carriage of explosive substances act to add a new title
24 providing for regulation of transportation, and conveyance
25 of pollutants, and basically, it would authorize the Secretary

of Transportation acting through the Coast Guard to regulate that.

Senator Tunney. What would be the position of EPA?

Mr. Jorling. EPA would regulate anything in the waters.

Senator Tunney. Would there be some sort of mechanism set up whereby the Secretary of Transportation, the Administrator of EPA, they would develop procedures.

Mr. Jorling. I think one of the things, the Secretary of Transportation would have to determine before he issued a permit for the transport, would be that the applicant has received the permit as required under the Federal Water Pollution Control Act from the Administrator to discharge, so before he could issue it, he would have to work it out with the Administrator.

Senator Tunney. Is that in the language?

Mr. Jorling. The former thing is in the language. The latter is not. The one you suggested, to direct these two executives to work together in implementing a permit program--

Senator Jordan. *Has the QUESTION OF* ~~is that~~ transporting pollutants, ~~has that~~ been defined in this bill? ~~what is it?~~

Mr. Jorling. It has not been defined in the House passed ocean dumping bill.

It would be proposed in this bill to define it, as

1 transportation by vessel or other floating craft.

2 Senator Jordan. I understand that portion, but how
3 are they going to classify it?

4 Mr. Jorling. By vessel.

5 Senator Jordan. What is in the vessel?

6 Mr. Jorling. The definition of pollutant would be as
7 contained in the Federal Water Pollution Control Act, and
8 anybody that proposes to carry one of those things in his
9 vessel would have to secure a permit from the Secretary of
10 Transportation, and I could read to you the criteria
11 extracted from the explosive substances section.

12 Senator Eagleton. He wants to know what is going to
13 be in the boat.

14 Senator Jordan. What is the pollutant he is going
15 to haul?

16 Mr. Jorling. What is in it?

17 Senator Jordan. Yes.

18 Mr. Jorling. The term pollutant would include any
19 and all of these things, dredge spoil, sewage, garbage,
20 munitions, radioactive materials, sand, dirt, industrial
21 wastes, cellar dirt.

22 Senator Jordan. Solid dirt?

23 Mr. Jorling. Cellar dirt.

24 Senator Eagleton. Well, how about item five,
25 definition of toxic pollutant.

33 1 Mr. Billings. Senator Eagleton, definition of toxic
2 Pollutant appears on page 110.

3 See page 111. The definition on page 111 has elicited
4 considerable comment because of its precision.

5 The Administration has proposed a considerably broader
6 and more general definition, and the staff has developed a
7 third set of thinking, and Senator Boggs has yet another
8 alternative.

9 Mr. Jorling. Other than striking the language to
10 exposure, just make it combination of pollutants, which
11 upon assimilation.

12 In theory, it could be water itself, since you
13 drown in water.

14 Mr. Billings. I suspect it is to someone who is
15 drowning, but it seems the language seemed to include
16 everything.

17 Mr. Jorling. The operative effect of this language
18 is to classify which materials, which pollutants are subject
19 to the toxic substances, regulatory procedures, under
20 procedures 307, so that the function of the definition is
21 trying to limit the Administrator from using that section,
22 to regulate discharge of those materials, as distinct from
23 the normal regulatory proceedings, as would occur, subject to
24 the approval of the Administrator.

1 Senator Tunney. What was the objections of EPA to
2 1500 parts?

3 I thought in the original discussion, it was a
4 desirable aspect of the definition.

5 Mr. Jorling. I do not think they supported the
6 recommendation it be deleted by much more than simply,
7 they felt it was, they were not quite sure what supported
8 it, and they are not quite sure what its effect would be
9 on the Administrator's discretion.

10 They would prefer to leave to the Administrator's
11 discretion what substances, only subject to the broad
12 outlines that they recommended on the column on page 111.

13 When he is free to use that regulatory authority--
14 I do not really think there is a good answer to your ques-
15 tion.

16 They have reacted much in the same way as many others
17 have.

18 Mr. Billings. We can describe the 1500 parts, that
19 this could include all materials that accumulate.

20 If it is derived from water quality criteria, it is
21 just a new concept in the sense that people have not lapped
22 onto it.

23 I talked to toxicologists, and they feel there is a
24 very broad figure, and would include all toxic materials.

25 Senator Tunney. What do they feel the definition,

1 how do they feel about the definitions suggested by EPA?

2 Mr. Jorling. We have not had time to get a reaction
3 from them.

4 Senator Eagleton. You are talking about the new
5 one?

6 Senator Tunney. The one suggested by EPA.

7 Mr. Westman. One thing, it would not include organ-
8 isms, such as viruses.

9 Second of all, it is not clear what is meant by
10 detrimental accumulative effects.

11 Accumulative effects is not a clear phrase in that
12 regard.

13 Also, it only applies, it does not apply clear to
14 aquatic organisms.

15 The concept of toxic, you have to show in them sub-
16 stantial danger to health, and welfare of persons, or water
17 quality, so this would tie into how we define water quality,
18 and if for some reason that definition does not include all
19 of the organisms in the environment, you get into trouble,
20 because as water pollution, as that bill changes, and the
21 definition of the water quality might change, you do not
22 want to have a definition of toxic change.

23 The present definition does not hinge on what we
24 mean by water quality. It is tied into effects on
25 organisms.

36 1 Senator Eagleton. Leon has handed me a definition
2 proposed by the Manufacturing Chemists Association.

3 I am no expert on anything chemical, but apparently
4 the staff has looked at it, and they think it is an improv-
5 ment over what we have.

6 I will read it to you if you want.

7 Mr. Billings. Not necessarily an improvement over
8 what we have, but considerably an improvement over what
9 EPA suggests.

10 Senator Eagleton. The term toxic pollutant means those
11 materials which may cause adverse, acute or chronic effects
12 on aquatic biological life forms; or accumulate and biomagnify
13 to a concentration level known to produce adverse, acute or
14 chronic effects on other aquatic biological life forms, or
15 cause adverse effect on humans, fish, or wildlife, which
16 come in contact with or consume waters containing such
17 materials.

18 I would suggest that we bounce this definition
19 around as well as another one that the staff is muddling
20 around with from EPA, and see if we can come up with a
21 composite.

22 Senator Tunney. Based on the staff's definition--

23 Senator Jordan. The whole object of this thing is ^{to}
24 ~~determine~~ ^{OR} ~~that we must describe~~ what is harmful to fish, [^] people. ~~or~~
25 ~~that~~ To go beyond that does not make sense. ~~but to make sure~~

37 1 ~~it is not harmful to either.~~

2 Mr. Billings. One other aspect of this question of
3 toxic pollutant, is whether or not the definition of toxic
4 should include viruses.

5 There is increasing amount of evidence that existing
6 treatment processes, that they do not remove the viruses
7 from the wastes, and there could be some very, there are
8 some very, very serious human health implications from this
9 failure.

10 Whether the members believe the viruses should be
11 included in the definition of virus pollutant is definitely
12 a policy issue.

13 Senator Beall. If you cannot remove them, it is very
14 difficult to remove them.

15 Senator Jordan. A lot of them do not know what
16 the virus is. That is getting into dangerous ground.

17 Mr. Jorling. What this would do is give the Adminis-
18 trator the authority against regulating those things. It
19 gives him the authority to control that species of things
20 as distinct of having it go through the standard of the
21 state or Federal program.

22 Senator Jordan. I do not think we should give the
23 Administrator ^{authority over} ~~a great many~~ things that ^{CAN BE SETTLED IN} ~~are decidable by some~~
24 other ~~methods~~ ^{WAYS.}

25 You have got to remember that we here are not alone.

There are some 200 million other people, and ~~the rivers are~~
~~INTERESTED IN CLEANING UP OUR RIVERS AND CREEKS.~~
~~still here, and there are many creeks, and so forth, so we~~
~~are not so far wrong, and we can improve.~~

We do not want to go completely overboard ^{IN SETTING UP} ~~where you~~
~~REGULATIONS THAT CANNOT BE ADMINISTERED AND WHICH REQUIRE~~
~~cannot administer the things, and then having~~ people do things
~~that are not necessary at all. to be done.~~ _{TO}

Senator Tunney. What would be the impact on research and development, if the virus is not included in the definition?

Would the Administrator have greater ability to make research development grants to determine ways to identify the viruses?

Mr. Billings. Probably not. I think that the result of including viruses as a toxic pollutant was to promulgate a restriction on the discharge, if somebody would do something that did not have the technology available, but I suspect that that will happen one way or the other, if the evidence is accumulating, is indicative, they will have to perform because the existing secondary treatment does not remove viruses, and this is a growing concern.

I personally believe it is a very high probability the major viruses are associated with it.

Senator Jordan. How do you know what the ^{VIRUSES ARE} ~~virus is~~, can you describe them?

Mr. Billings. No, but I know how to find them.

1 Mr. Jordan. How?

2 Mr. Billings. With electronic microscopes.

3 Senator Jordan. There are millions of them.

4 Mr. Billings. You cannot identify what they are.

5 Senator Jordan. You do not know whether they are
6 good or bad.

7 Mr. Jorling. The inclusion of viruses is to prepare
8 for the situation, as we found ourselves in mercury.

9 It became obvious, it was being discharged in rather
10 large quantities, that its effects were generally agreed to
11 being toxic, yet the Administrator was helpless, because he
12 had no authority to regulate it.

13 This would provide that if he knew viruses were pro-
14 viding the kind of effects that mercury were, he could step
15 in.

16 It is simply to provide him with authority. It does
17 not require him to set new effluent standards for all viruses.

18 It gives him authority when he feels a virus is of a
19 certain character to require control, then he has the
20 authority to control it.

21 Senator Eagleton. How about putting in the word
22 identifiable viruses.

23 Senator Jordan. I think if you are putting in the
24 word virus, you are going overboard. ~~In~~ ^The case of mercury,
25 ~~it is causing~~ something else.

1 Senator Cooper. Could a virus be there one day and
2 go the next day?

3 Mr. Jorling. It is concentrated in the waste stream
4 as a result of the sewage system, linking many people's
5 systems together, concentrating them in a treatment facility,
6 and the treatment facilities are not removing them, and
7 then discharging them into receiving waters, which often-
8 times forms the water supply for downstream users, and the
9 question is how can they be regulated, and still be subject
10 to intensive R & D.

11 There are several methods being experimented, to
12 remove them, but they are accumulating in the waste streams.
13 They come from the humans who happen to be sick.

14 Senator Randolph. It is my feeling, and I address
15 my remarks to Tom here, it is my feeling that, and I only
16 use this language that I am now stating, we must be very
17 careful of what we do with viruses.

18 We do not want it to make us look foolish. I say
19 that advisedly. If we can have certifications, we want to
20 make them. If I feel we can, and you gentlemen feel we
21 can, fine.

22 Now, I had a Doctor tell me and my wife just a few
23 days ago, and he is a very fine doctor. He is in the Washing-
24 ton Clinic here, one of the top men, Doctor Christopher,
25 he said, Mr. Randolph, in reference to a certain situation, I

41 1 don't know. I think this is some kind of a new virus. Now,
2 he made that statement himself. Now, when I find men of
3 medicine, men of let's say leadership making statements of
4 that kind, I think we have to be very careful here.

5 Do you share this feeling?

6 Senator Eagleton. I would agree. If we put in the
7 word identifiable, it would read as follows: Shall include
8 identifiable viruses."

9 It would mean that, to me, and somebody correct me
10 if I am wrong, that EPA would have to identify the virus,
11 and show that it was one that they could say, here it is, in
12 the strain X, and it has an adverse effect on organisms in
13 receiving waters and on humans.

14 Senator Randolph. Everyone accept that?

15 Senator Jordan. I would also say, if it is known to
16 be harmful to the human being--

17 Senator Eagleton. Is that not the problem, of
18 identifying?

19 Senator Jordan. It may be one virus in a hundred
20 million parts of water, and that would not hurt anybody.
21 Your body disposes of millions and millions of viruses ~~all~~ EVERY
22 ~~the time. When it does come, that is when they take you out~~
23 ~~and bury you, but you do not want to say you have one virus,~~
24 ~~and you have got to get it out.~~

25 Mr. Billings. Under the mechanism for regulation of

pollutants, the Administrator would be required to set an effluent standard. This is for toxic pollutants. That would be the point in which the judgment would be how many parts per million would or would not be allowed, so that would protect the point you are making.

Senator Jordan. It is if you do not make it too close.

Lots of times they say just make it half that, ~~so just~~ ^{to be} ~~sure. The only trouble is~~ ~~we knew it would be right when~~ it would be almost impossible to meet that standard.

I would say ^{MAKE IT APPLY TO ANY} ~~some known and identifiable~~ ^{PRESENT} virus in such quantities as would be identifiable.

~~A virus, if it is not known, you cannot get~~ ^{a virus} ~~it~~ out, ^{IF YOU} ~~DO NOT KNOW WHAT IT IS.~~

Senator Eagleton. I think if you dovetail identifiable viruses, which caused adverse effects, that it will not be down to one per zillion, and then the two read together as with all other toxic substances.

Mr. Westman. The thing about viruses, as they begin to grow, they produce more virus, so it is very likely you would have to set permissible concentrations.

Senator Cooper. On this subject, it would case adverse effect including death. That is identifiable. Cancer, I do not think they know what causes it. They are working on it.

Senator Jordan. We just passed a \$400 million bill

43 1 to do that.

2 Senator Cooper. Genetic mutations, how far are we
3 going on with these abnormalities?

4 Mr. Westman. For example, some of the initial
5 symptoms of lead pollution, of lead toxicity of behavior,
6 where a person may have shaking limbs, or he may have loss
7 of memory, and we can detect this by the test, by tissue
8 analysis for lead.

9 In the case of fish, you know, the way the fish
10 swims is one test.

11 Senator Cooper. The physical behavior.

12 Senator Jordan. The trouble about that is ~~this, here~~ ^{that you}
13 ^{have} ~~is~~ a whole city full of people, and they are all drinking out
14 of the same city plant.

15 One fellow ^{is affected} ~~gets this~~, and the other fellow ^{is} ~~does~~ not.
16 Now, that is what you are up against.

17 Senator Beall. Alcohol causes adverse behavior.

18 Senator Tunney. Do I understand your position that
19 you are opposed to having virus mentioned in any form in the
20 definition, Senator Jordan?

21 Senator Jordan. I think we are skating on very thin
22 ice when we do, because there are so many of them, some of ~~which~~
23 ~~they~~ are not identifiable, ~~and you have a new one many times, and~~
24 ^{and} Everytime there is a new epidemic, ^{CAUSING IT,} the doctor does not know
25 what ~~it~~ ^{is} and he says it is a new virus. That clears him,

and he gives the patient SOMETHING TO COMBAT IT.

~~so they give you something that will get it.~~ If it does not, WORK
~~and~~ there is nothing wrong with the doctor's analysis, he just
 does not know.

The same thing ^{applies} if we are going to try to determine
 how many parts ^{there are} to a virus, ~~all of these things, it is impossible.~~

I know one man ^{who,} he said, he got a virus from eating oysters.
~~People living in the area eat them all the time~~
~~The natives eat them there, and ten thousand people eat them~~
~~there week after week,~~ and nobody else got it, but yet he
 thought he got ~~it from them.~~ the virus that way.

The doctor did not argue with him, ~~so they~~ ^{and} just said
 he got hepatitis.

You have to be careful, ^{NOT TO} ~~because you will~~ issue regula-
 tions ^{that} ~~maybe~~ nobody will follow.

Senator Tunney. What happens if scientific research
 demonstrates an identifiable virus because this virus causes
 such and such effect.

Senator Jordan. I think you ~~would put it in there in~~ ^{NEED LANGUAGE SPECIFYING}
 "sufficient quantities" which would be what we are talking
 about.

You could have a virus, ^{WHICH} ~~and this~~ could be ~~such virus~~ ^{ONE}
 as would cause cancer, ^{but you would have to} ~~and now they cannot find~~ ^{and identify it}
~~which one it is, so how do they kill it.~~ BEFORE YOU WOULD KNOW
 HOW TO KILL IT.

If they find it, then it is easy, but we must be sure
 we are not ^{TRYING TO REGULATE SOMETHING} ~~putting something in there~~ that is impossible to
 find.

45 1 Senator Tunney. If you had the scientific research
2 in there, it would provide, it seems to me, to indicate very
3 clearly there had to be some data base upon which to draw an
4 opinion on, and I think that would to a considerable extent
5 eliminate the fears that you have, that the Administrator would
6 take unidentifiable viruses, and the subject then would be
7 under stringent controls that he would have such bacteria
8 under, or some other such toxic substance, which would easily
9 be identifiable.

10 Mr. Jorling. Any attempt at regulations of any of
11 these substances would fall within the category of actions
12 of the Administrator that we are talking about, would subject
13 the Administrator to judicial review in the Court of Appeals
14 for the District of Columbia, so there would be an opportunity
15 for any person who felt he was acting in an improper manner to
16 seek judicial interpretation in view of that action.

17 Senator Jordan. Well, you are going to bring a lot
18 of good people up here before this Court, and that costs
19 money, and I am not certain that the lawyers would know
20 anymore about it than the fellows who are doing the polluting. The
21 agency ~~they~~ will have to have a tremendous staff of scientists, to
22 ADMINISTER THIS KIND OF REGULATORY PROGRAM.
~~for people who say it is or it is not.~~

23 That could be a tremendous ~~argument~~ PROBLEM,

24 Senator Cooper. If we go from this definition to
25 Section 309, 307, under 307, the Administrator must within

1 ninety days after enactment of that publish a list of all of
2 these pollutants.

3 We are talking about toxic pollutants, and then he
4 is required to establish standards to prohibit them, and to
5 bring them under control in one year.

6 Is it practical we can do that?

7 the term
8 Senator Jordan. Suppose he just puts in "virus". ~~in~~

9 ~~there.~~
10 Senator Cooper. And what relationship would the Surgeon
11 General have with this problem.

12 I think this is a practical matter to what is known,
13 and what is not known, and could they establish standards for
14 the control, so that it would have an effect within a year,
15 when the medical profession and the scientific professions
16 cannot do this.

17 I am just asking questions now.

18 Mr. Westman. There are some viruses in which there
19 are mechanisms, but by storing the viruses for twenty days,
20 this is how most municipal water supplies try to get the
21 viruses out of the drinking water.

22 They store the water. Most viruses have to be in
23 a living host to survive, so if they are sitting in the mud,
24 and the water long enough, they will die.

25 Unfortunately, there are some viruses which can
survive quite long periods of time, so the Administrator would

1 have to single out categories for virus, for which this treat-
2 ment was available.

3 It is also true, if you spray water on the land that
4 contains viruses, if the soil conditions are right, viruses
5 will be stored in the soil long enough that they will ordi-
6 nary die there, so again, it might still leave some for
7 which there is no known way of identifying them.

8 Senator Jordan. The effluent now goes through a
9 treatment plant, and then it goes down-stream.

10 Now, that is what you have now, and you will have in
11 the future.

12 Mr. Billings. Would not a more appropriate place
13 to regulate this discharge be in association with the grant
14 program where you actually have a handle on applying certain
15 levels of control with dealing with viruses, so that when a
16 man comes in for a grant, you say, you have got to deal in your
17 plant with viruses, and you have got to design it so it will
18 take care of it.

19 Would that be a logical alternative?

20 Mr. Westman. The question remains whether you want
21 to leave in certain organisms.

22 Senator Jordan. What I am talking about, Leon, ^{is this:} Suppose
23 he does come in for a grant, you say, well, it will take so
24 many dollars to build a pool big enough to hold this water
25 for twenty days, ~~and say, well,~~ ^{and} we cannot do it in the first

place ^{because} we do not have the land, so you are not going to do that, so you come back to where you have an ordinary treatment plant, which is modern, and how much treatment can you put in that, and the volume will just have to go through that.

Sewage is the easiest form of pollutant to treat. That is the easiest of all. ^{SEWAGE} ~~They~~ ^{ITSELF} digests ~~themselves~~ through ~~the~~ oxidation, and when you add chemicals, this is when you ^{the process and} complicate ~~it, it~~ slows it down, ~~and~~ ^T that is what increases the size of your plants, so you have to be mighty careful what you put in a treatment plant, ^{to be sure you will have one that} ~~so you do not have a treatment plant that~~ will do what it has to do, and you have to be careful that something might happen.

Senator Eagleton. May I suggest then, Mr. Chairman, that we pass this subject, pass on to see if there is some method of both identifiability and measurability, which I take it is the problem here.

The problems seem to be if the virus can be identified, and it is of such magnitude to cause serious effects on waters and on humans, then your complaint would not be very strong.

Senator Jordan. I think you can also put in ~~there~~ ^{the phrase} "and known methods of treatment."

Suppose the Administrator said we have to take ~~then~~ ^{LANGUAGE} out.

Senator Cooper. We need some comments from the

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1 Surgeon General on this.

2 Have we got any?

3 Mr. Billings. We will solicit some comments on
4 that.

5 Senator Eagleton. All right. Let's go back to the
6 drawing board on that.

7 Generally we are pretty close for toxic pollutants
8 except for viruses.

9 Senator Randolph. Let's adjourn at this time, and
10 we will meet tomorrow at 2:00 o'clock.

11 Senator Tunney. Just one thing I would like to ask,
12 is it possible where we have a conflict in hearings, would
13 it be possible to put off discussion of specific items which
14 a member has a particular great interest in, until such time
15 as he arrives in the Committee hearing room?

16 Senator Randolph. I can answer you very quickly.
17 I would want to do that, not only for you, but for all members
18 of the Committee.

19 We would want to accommodate the members of the
20 Committee.

21 That does not throw us much out of gear to follow
22 that practice.

23 We want to be flexible.

24 All right.

25 Is there anything else to discuss at this time with

50 1 regard to any matters?

2 Then we will adjourn until tomorrow at 2:00 o'clock
3 in the afternoon.

4 The hearing is adjourned.

5 (Whereupon, the meeting was adjourned at 5:30 o'clock
6 p.m., until 2:00 o'clock p.m., September 21, 1971.)

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